

In addition to the above the following species were collected by Mr. Geo. H. Clapp; these complete to the present date all the species found in Allegheny County, Pennsylvania.

Strobila labyrinthica Say.

Mesodon clausa Say.

Mesomphix levigatus Pfr.

Gastrodonta suppressa Say.

Vitrina limpida Gld.

Vertigo bollesiana Mse.

Pupa corticaria Say.

A NEW PAPUINA.

BY CHARLES HEDLEY, SYDNEY, AUSTRALIA.

Papuina cerea Hedley.

Shell thin, translucent; contour trochoidal, color waxen white, becoming yellowish on the 3rd and 4th whorls, encircled below the suture by an opaque white thread, *nowhere are translucent lines or spaces visible*. Sculpture: surface of a waxen polish; transverse growth lines can be detected by the unaided eye, and spiral grooves, almost effaced above but plainer on the base, may be



deciphered with a lens. Whorls $5\frac{1}{2}$, flattened, regularly increasing, the last constituting five-eighths of the shell's height, angled at the periphery, descending considerably and abruptly at the aperture, gibbous at the point of flexure. Suture impressed. Aperture very oblique, anterior margin waved; *columella* oblique, wide, *extending nearly to the angle of the aperture, subtruncate below*. A thin, translucent, shining callus extends over the imperforate axis to the insertion of the anterior margin of the lip.

Height $13\frac{1}{2}$, major. diam. 16, min. diam. 14 mm.

Hab. Bloomfield River, North Queensland.

ON THE SPECIES OF MACTRA FROM CALIFORNIA.

BY WM. H. DALL.

In revising the Tertiary *Maत्रacea* of the southeastern United States, it became necessary to examine the recent species and work

up their synonymy. The species of the Pacific coast especially have long been known to be in a very bad state as regards nomenclature, etc. Several long known forms appear, on investigation, to be really nameless, the titles belonging to other less conspicuous species having been applied to them, while some of the earliest named forms have been lost sight of. I hope to furnish the NAUTILUS, shortly, with synonymic lists of the east and west coast *Mastras*, pending the completion of which the following descriptions are offered.

Mastra catilliformis Conrad. Pl. V, fig. 3.

Shell large, thin, whitish or straw color, irregularly concentrically striated, with a gray, wrinkled epidermis, inflated short-oval subequilateral valves and closely adjacent inconspicuous beaks; anterior end of shell evenly rounded in front, a little shorter than the posterior end; lunule narrow, impressed, escutcheon narrow, longer, rather obscure; posterior end of valves rounded, slightly compressed and with a narrow gape when closed; hinge resembling that of *M. polynyma* Stm., but more concentrated, cartilage pit large, rather produced; posterior muscular impression larger, pallial sinus rather large, rounded in front. There is a faint posterior flexure of the valves and a feebly marked area above it, on which the epidermis is more conspicuous. Lon. 108.0, alt. 87.0, diameter 45.0 mm., in a moderately sized pair, but the adult reaches 140.0 mm. in length.

Distribution: Neeah Bay to San Diego, Cala.

This is *Standella californica* Carpenter, but not of Conrad or Deshayes. It was imperfectly described without a figure by Conrad in the *Am. Journ. Conch.* vol. iii, p. 193, 1867, and erroneously stated to come from Panama. *M. lenticularis*, Gabb, 1866, from the Miocene of California is closely related.

Mastra Hemphillii n. s. Pl. V, fig. 2.

Shell large, thin, inflated, subequilateral, creamy white with a yellow thin epidermis, which over the body of the shell in young shells is beautifully evenly concentrically striated and on the posterior dorsal area is irregularly wrinkled, with an elevated raphe of epidermis at the margin of the area; beaks rather prominent, the anterior end of the valves longer than the posterior; posterior dorsal slope excavated; lunule obscure, escutcheon marked by prominent elevated radial lines of epidermis; the dorsal margin pouting in front of the ligament, the posterior slope convex, the posterior flexure

faint, but marked by a recession of the ventral border of the valves, which gape but very little and not at all in front; anterior end rounded, but smaller than the posterior; ventral border arcuate; hinge and pallial sinus much as in the last species, except that the sinus is somewhat smaller and less depressed. Lon. 120, alt. 93, diam. 50 mm.

Distribution: San Diego, Hemphill and Cooper.

This fine and perfectly distinct species appears rare and I have seen but two specimens, both from San Diego.

The preceding species belong to the subgenus *Standella* as adopted by H. and A. Adams, but the following is a true *Mactra*, with the ligament separated from the cartilage pit by a shelly plate.

Mactra dolabriformis Conrad, 1867. Pl. V. fig. 1.

Shell much compressed, polished white under a dull brown epidermis, subequilateral with inconspicuous beaks. It closely resembles *M. fulcata* Gould (from type) but has higher beaks more centrally set, the anterior end more attenuated and less truncate, the left anterior lateral tooth single and distally more prominent; the left cardinal larger and wider; the posterior adductor scar horizontally elongate and smaller. Lon. 90, alt. 63, diam. 26 mm.

Distribution: San Diego, Cala. to Guaymas, Mexico; "Panama" Conrad.

This remarkably handsome shell has not unnaturally long been confounded with *M. fulcata*, from which the hinge separates it subgenerically.

The true *M. californica* of Conrad is a *Mactrinula* and can at once be recognized by its sulcate beaks. It reaches 36 mm. in length. The *M. planulata* is also a small species, resembling *M. polynyma* in miniature. The northern form generally referred to *M. fulcata* is a barely separable variety of *M. polynyma* which may take the name of *Aluskana*.

NOTICES OF NEW CHITONS, III.

BY H. A. PILSBRY.

Certain rectifications of the previously accepted nomenclature have become necessary, and may be made here.